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RCRA AUTHORIZATION IN MASSACHUSETTS
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I. Introduction: The Problem

The EPA's current implementation of RCRA authorization entails a lengthy process of conducting a line-by-line checklist review comparing state and federal hazardous waste regulations. This practice creates barriers to capable states that enact regulations that are not identical to EPA's program but are equally protective. EPA's RCRA authorization approach results in Massachusetts and EPA both expending significant resources to engage in protracted authorization discussions that result in little or no value in terms of environmental protection. Since the Massachusetts hazardous waste program received base RCRA program authorization in 1985, there have been a continuing series of authorization disputes between the agencies that have significantly impaired the overall rate of authorization of the Massachusetts program.

It is generally agreed that Massachusetts operates a very capable hazardous waste program. During the fifteen years of its existence, the Massachusetts recycling program has required and issued recycling permits and enforced regulatory requirements for a wide range of recycling activities, an approach that has been demonstrated to be more comprehensive and more stringent than the federal program. In many ways, the Massachusetts program exceeds federal standards in both protectiveness and volume of wastes regulated. However, the traditional EPA authorization approach fails to recognize the true capability and environmental performance results of the Massachusetts program, and instead creates impediments to Massachusetts' innovation because its' program is not identical to the federal RCRA program.

As an initial step forward under this application, Massachusetts DEP requests that EPA grant RCRA authorization to the pending Massachusetts regulations under one or more scenarios, each of which are separately presented but are not necessarily mutually exclusive. In evaluating the scenarios, please consider all arguments, as we did not repeat arguments and discussions in every section. One of the scenarios is a request for ECOS flexibility. The scenarios include:

- The materials regulated under the Massachusetts program are not "Solid Waste" and therefore are not subject to RCRA. The recent decision in Battery Recyclers supports this position.

- EPA should implement a broader interpretation of its authorization requirements to provide states with needed flexibility to determine that the Massachusetts rules are legally equivalent to the federal rules. EPA should apply its "Program Strategy to Meet 2005 GPRA Goals" statements and authorize the pending regulations. In the alternative, EPA could promulgate new rules to provide greater authorization flexibility.

- The Massachusetts' rules are functionally equivalent to the federal rules and are, in many respects, more stringent. EPA should consider the totality of the Massachusetts rules and program accomplishments in making an equivalence determination rather than relying solely on a line-by-line checklist review. There are precedents for EPA utilizing more flexible authorization reviews under other programs (e.g. the CAA 112(l) MACT delegation review for Massachusetts ERP dry cleaners).

- Alternatively, EPA may also authorize the Massachusetts' rules under the ECOS process by exercising flexibility. Below DEP presents information supporting each of the ECOS flexibility criteria, and in addition emphasizes the overall capability of the Massachusetts hazardous waste program.

Massachusetts DEP requests that EPA authorize the Massachusetts rules, and in the spirit of the ECOS process, that EPA provide the rationale for not adopting any or all of the positions described above. DEP also requests that EPA implement its current policy statements and guidance on authorization, and align the authorization process with current policy. The uncertainty that results when EPA issues such flexible policy statements while making no changes to authorization checklists or procedures makes it confusing and difficult for states to pursue innovative environmental regulation.

II. Background on Hazardous Waste Recycling Authorization Issues

EPA has raised authorization issues in regards to the Massachusetts Class A recycling program. The primary authorization issue relates to hazardous waste status calculations, while other issues include formal contingency planning, and time limits on hazardous waste accumulation. In particular, EPA has questions about the equivalence of the hazardous waste status calculation provisions under the state recycling regulations. DEP regulations specify at 310 CMR 30.351(2), 310 CMR 30.221(4), and 30.353(2)(b)(4)[1], that Class A recyclable materials, accumulated at the site of generation in completely enclosed recycling systems (i.e. freestanding recycling units), need not be included when determining a generator's hazardous waste status. These provisions create an incentive for generators to recycle, instead of treating or disposing of, these materials. The Federal RCRA program at 40 CFR 261.5 requires such recyclable materials to be included in status calculations. EPA has focused on this difference as

[1] These regulatory citations can be accessed at the following URL: http://www.state.ma.us/dep/bwp/dhm/files/regs/hwregnav.htm

the basis for asserting that the state recycling provisions may be less stringent than the federal program, and therefore may not be authorized as equivalent.

III. Massachusetts Class A Recycling Program is Outside the Scope of RCRA

The Massachusetts Class A recycling program regulates materials that are clearly exempt from RCRA statutory and regulatory authority and are therefore outside the scope of the authorization process. In Association of Battery Recyclers, Inc. v. U.S. Environmental Protection Agency, No. 98-1368 D.C. Circuit 2000 *FindLaw*, 203 F.3d 1047, (D.C. Circuit 2000) ("Battery Recyclers") the court held that Congress did not intend for material that has been set aside and stored for recycling to be included in the term solid waste. The mineral processing wastes described in the case are analogous to the Class A recycling materials at issue here in that both are so-called "secondary materials" that are destined for re-use and are not abandoned, discarded or thrown away. As a result, these materials are not solid waste subject to RCRA jurisdiction.

RCRA defines solid waste as "any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other *discarded material* . . . ." (emphasis added) See 42 USC section 6903(27). In its' decision, the Battery Recyclers court noted that the question of whether secondary materials were solid waste had previously been answered by the district court in American Mining Congress v. EPA, 824 F.2d 1177 (D.C.Cir. 1987) ("AMC I"). In reaffirming that earlier decision, the Battery Recyclers court again applied the ordinary meaning to the word "discarded" as meaning "'disposed of,' 'thrown away,' or 'abandoned.' *Id.* at 4, quoting AMC I at 1184. The court concluded that "Congress clearly and unambiguously expressed its intent that 'solid waste' (and therefore EPA's regulatory authority) be limited to materials that are 'discarded' by virtue of being disposed of, abandoned, or thrown away." *Id.* at 4, quoting AMC I at 1190. Applying this reasoning to the materials at issue in Massachusetts' Class A recycling program it is clear that these materials are not solid waste, but are in fact valuable materials that are either reused on site or sold off-site as product.

In Battery Recyclers the relevant portion of the opinion reviewed the application of EPA's interpretation of solid waste as it applied to residual or secondary materials generated in mining and mineral processing operations. Like the materials in Battery Recyclers, the Class A recyclable materials are neither abandoned nor thrown away when they are destined for re-use. The Massachusetts recycling program regulates, among its activities, stand-alone solvent stills, stand-alone photo-processor silver recovery units and waste oil space heaters. For example, used solvents generated from an industrial process are accumulated and stored on-site in tanks and containers in a continuing process. The solvent materials are placed in a solvent distillation unit that separates impurities and renders the solvent reusable. The solvent is then used on-site in an industrial process. Under the Battery Recyclers court's analysis these secondary materials are not solid wastes. While the facts in the case focused on secondary materials used on site, the same reasoning could apply to secondary materials that are reclaimed on-site and sold off-site, as is sometimes the case with recovered silver. The operative fact is that the materials are reused; and not abandoned, disposed of or thrown away. The court reviewed EPA's regulation of materials that are in "continuous recirculation of secondary materials back into recovery process *without prior storage* (emphasis added)" as being clearly contrary to its interpretation that a

material must be thrown away or abandoned before EPA may consider it to be a waste. Indeed, the court stated "material stored for recycling is plainly not in that category." Id. At 5. Applying the court's analysis to the Massachusetts program, it is clear the materials subject to these regulations are not within the scope of EPA's RCRA jurisdiction and therefore are not subject to EPA's authorization process.

EPA has acknowledged that the Battery Recyclers decision may have ramifications broader than the mineral processing wastes at issue in the case. Consistent with the holding in Battery Recyclers, EPA's memorandum on the regulatory status of foundry sands (E. Cotsworth to American Foundry Society, March 28, 2001) states that sands "reused onsite in the primary production process on a continuous basis in the sand loop are not solid wastes." DEP applauds EPA's efforts to reconcile its regulations and guidance to the Court's ruling in Battery Recyclers and asks that EPA continue this reconciliation and apply the same analysis to Massachusetts Class A recycling program.[2]

IV. EPA Could Implement a Broader Interpretation of Authorization Requirements to Provide States with Needed Flexibility

EPA has interpreted the existing authorization statute and regulations in a manner that mandates nearly identical state and federal provisions. DEP believes that the existing authorization statute and regulations could be interpreted in a manner that would provide the states with much needed flexibility without sacrificing overall stringency or environmental protection. EPA has latitude to exercise the full extent of reasonable flexibility in regards to its authorization statute and regulations as expressed in its own policy statements and internal guidance documents.

As provided by RCRA, Section 3006, and further defined by EPA at 40 CFR 271, EPA must authorize state programs that are consistent with and equivalent to the Federal program. RCRA Section 3009 further specifies that a state may not impose any requirements that are less stringent than the federal RCRA regulations. However, neither "consistent" nor "equivalent" is defined in the statute or regulations nor do the statutory or regulatory requirements specify the process for making an equivalency or consistency determination. The only regulatory guidance is provided in a footnote to 40 CFR 271.14, "Permit Requirements," which reads:

> "States need not implement provisions identical to the above listed provisions. Implemented provisions must, however, establish requirements at least as stringent as the corresponding listed provisions. While states may impose more stringent requirements, they may not make one requirement more lenient as a tradeoff for making another requirement more stringent; for example, by requiring that public hearings be held prior to issuing any permit while reducing the amount of advanced notice of such a hearing."

[2] Although the Battery Recyclers decision wholly excludes these secondary materials from regulation under RCRA as hazardous wastes, under statelaw, DEP does in fact regulate Class A recyclable materials as conditionally exempt hazardous wastes.

The EPA regulations indicate that each state requirement need not be identical. Neither "consistent" nor "equivalent" is defined in the statute and regulations, however it is clear that these terms mean something other than identical. While a line-by-line comparison may have been a reasonable approach at the start of the program, such an identical comparison is not required, a conclusion EPA has also reached, as discussed below. With twenty years of experience behind us, it is reasonable to now look more flexibly at the statutory and regulatory language and implement a comparison that does not rely on a standard of identical language.

Typically, however, EPA's approach to equivalency has consisted of a line-by–line, item-by-item comparison of the federal and state programs. Indeed, a "checklist" is developed as the primary equivalency-measuring tool. To illustrate, the current delayed authorization package includes 267 pages of regulatory updates that are accompanied by a 384-page line-by-line review checklist. The effort put into completing the checklist, instead of following the above guideline, is enormous. Indeed, in past authorization applications the failure to "match up" has led to protracted negotiations to agree on "equivalent" language and often results in disapproval, partial approval, or interim authorization.

EPA has issued only one memorandum clarifying and interpreting the term "equivalency" in reference to state authorization, "Equivalence in RCRA State Authorization, Statutory and Regulatory Summary" (EPA Headquarters, Office of General Counsel, 2000). The memorandum quotes text originally drafted in an April 29, 1996 Federal Register notice proposing to clarify state authorization regulation. The EPA Office of General Counsel memo cites the following from this 1996 Federal Register rule proposal: states and regions should

> "[e]fficiently focus authorization applications and review on the ability of the proposed state programs to meet the minimum national standards, rather than on line-by–line comparisons of state and federal regulations. One of EPA's guiding principles in developing streamlined authorization procedures for program revisions was that state programs do not have to be exactly the same to be equivalent, and that EPA should focus its authorization review on environmental results. EPA is considering applying the definition of "equivalent" discussed above to all authorization decisions." Id. at 5.

This portion of the proposed rule was never finalized. Through the Federal Register proposal, guidance and policy, EPA has indicated that a more flexible state authorization approach is beneficial, and more importantly**, allowable** under the current authorization scheme.

More recently, EPA issued the "RCRA Program Strategy to Meet 2005 GPRA Goals" (December, 2000) which stated:

> "In the authorization process, EPA will eliminate administrative barriers to decrease the time and effort required to authorize States for all parts of the program. EPA will focus on the major issues and the functional equivalence of state programs, rather than on minutia. This means giving States the benefit of the doubt with respect to statutory requirements, equivalence, and capability." Id. at 3.

As evidenced in these EPA documents, there is room for EPA to interpret its own authorization provisions more flexibly, and to take a broader view of its approach to state authorization. However, since these documents were issued, EPA has not implemented this flexibility through its regional offices. There have been no changes to EPA authorization checklists or their accompanying instructions reflecting a change to a functional equivalency standard.

The manner in which EPA currently implements authorization fails to accommodate the type of problem solving strategies for environmental protection that many states and affected stakeholders develop that offer equivalent protection, but are not identical to federal requirements. However, the more flexible approach represented in its policy statements could embrace innovative problem solving. For example, under the Massachusetts Environmental Results Program, the stakeholder discussions that led to unified record retention requirements for air, water and waste programs resulted in an important common sense approach to further an innovative regulatory system. This proposal initially met with significant EPA resistance based on the agency's narrow, one program focus (See discussions of the Environmental Results Program in next section).

Similarly, the Massachusetts recycling program takes a comprehensive approach designed to promote and provide incentives for recycling while protecting the environment and ensuring public safety. The Massachusetts program does not tradeoff a less stringent requirement for a more stringent requirement, but rather comprehensively regulates a very broad class of recyclable materials consistently and provides the flexibility necessary to encourage recycling and safe management. While the two programs are not identical, the test is whether the state program establishes requirements that are at least as stringent; the Massachusetts program exceeds this standard (See attached Equivalency Chart and Functional Equivalence section which follows). During its 15 years of existence, the Massachusetts program has issued permits and enforced regulatory requirements for a wide range of recycling activities, an approach that is more inclusive and stringent than the federal program. Overall, the Massachusetts program achieves an equivalent, if not superior, environmental result. DEP believes that it is consistent with EPA-issued policy statements to focus on the overall stringency of the state requirements and approve the overall program.

EPA could consider the entire scope and impact of the state program when making an equivalency determination. The issue of whether the Massachusetts Class A regulations are equivalent to the federal scheme depends upon one's frame of reference. If the test is whether an overall state program or overall major portion of a state program protects the environment at least as stringently as the federal program, then the Massachusetts program passes the test.

In the alternative, should EPA determine that it cannot provide flexibility under the current authorization law and regulations, DEP requests that the agency make a rule change that would allow it to provide the needed flexibility to align its review process with its policy statements. As discussed in the next section of this application (Environmental Results Program), EPA conducted a similar rulemaking under the Hazardous Air Pollutants amendments (Federal Register, September 14, 2000) to provide flexibility to states in the equivalency

determination process under the Clean Air Act. DEP requests that EPA take appropriate steps to reconcile it policy statements with it authorization review process.

V. Massachusetts Class A Recycling Program is Functionally Equivalent

EPA should consider the totality of the Massachusetts rules and program accomplishments in making an equivalence determination rather than relying solely on a line-by-line checklist review. The Massachusetts recycling program is functionally equivalent, and in many respects more comprehensive and stringent than the federal program. All the basic federal requirements are in place, including the requirement to do waste determinations, the requirement to obtain hazardous waste identification numbers, and safe handling requirements. The issue of counting recyclable materials towards a generator's waste status is negligible in the context of the entire Massachusetts recycling scheme. In addition, while the accumulation and contingency plan provisions are not identical, these issues are covered and merely addressed differently. The functional equivalence approach should be the standard for the EPA review.

There are strong correlations between the state and federal provisions governing the determination of hazardous waste generation, accumulation and corresponding generator status. The attached equivalence matrix compares the regulatory requirements of the EPA and Massachusetts programs and illustrates the overall functional equivalence of Massachusetts' program. See Equivalence Matrix, Attachment A, and also see 310 CMR 30.221(4) and 40 CFR 261.5(c)(3). The federal scheme excludes from generator status calculations, hazardous waste that is recycled on-site without prior storage or accumulation. The Massachusetts program excludes recycled hazardous waste regardless of prior storage or accumulation, however, to ensure adequate protection, it does regulate such material. See 310 CMR 30.200. In fact, the Class A regulations cover all generators covered by the federal RCRA regulations under some level of regulation. The state program adds a number of conditions not required by the federal program even for those hazardous wastes it excludes from generator status calculations. The state program requires a completely enclosed recycling unit; prohibits combustion, use as fuel or use in a manner-constituting disposal; and requires that the material be accumulated in compliance with extensive generator-like provisions. See 30.205(1)-(19). These generator-like requirements include, but are not limited to, tank and container management standards, secondary containment, personnel training, record keeping and reporting, emergency prevention and response, and prohibitions on speculative accumulation.

While the Massachusetts program excludes stored and accumulated materials from status calculations, it does regulate them. On the other hand, when EPA excludes a waste from regulation, the waste is completely unregulated by the agency. The Massachusetts program easily satisfies the functional equivalence test as discussed in EPA's "Program Strategy to Meet 2005 GPRA Goals" policy.

Even if DEP did not apply the above conditions to Class A regulated recyclable materials or "RRMs," allowing accumulation prior to recycling would not render the Massachusetts program any less stringent than the federal program. See 310 30.212(10) and 310 CMR 30.221(4). EPA has argued specifically that the status calculation rule routinely allows LQGs to operate under a lesser status (i.e. SQG), thereby avoiding such requirements as having a formal

Contingency Plan. However, while such materials are not specifically covered under a written contingency plan, they are extensively regulated including emergency prevention and response requirements. More often than not, a generator recycling large amounts of solvent (that can be deducted from status calculations) is also generating other wastes that would cause the LQG to retain its higher status. While it is difficult to say with certainty how many LQGs may be operating under a lesser generator status because of the exclusion of RRMs from status calculations, DEP estimates that fewer than a dozen of all the permittees with solvents stills (175) and stand-alone silver recovery units (40) could possibly fit this description, and that the number is probably significantly less.

However, a generator that has a lower status as a result of exclusion of RRMs from status calculations at 310 CMR 30.221(4) remains subject to requirements designed to ensure that materials are managed safely prior to recycling. These state-only requirements include tank and container management standards (including the closed container rule at 310 CMR 30.685(1)), record keeping, tracking, annual reporting, the speculative accumulation prohibition, personnel training, emergency prevention and response. These requirements go beyond what is required by EPA for recyclable materials. In addition, the Department has a safeguard in place in the event that recyclable materials cause a problem, even if managed in accordance with the recycling requirements. Specifically, 310 CMR 30.201(2) requires that if any action is taken with respect to a recyclable material that is consistent with the recycling rule but creates a significant potential hazard to public health, safety, or the environment, the recycling rule shall cease to be applicable and full hazardous waste regulation will apply.

Regarding EPA's concern that the recycling regulations allow permittees to accumulate RRMs for more than 90 days (or 180, as applicable), this added flexibility is intended to allow businesses greater latitude in deciding when it is most efficient to recycle, while retaining safeguards designed to minimize accumulation abuses. The Department has observed over the years that best business practices generally preclude companies from waiting more than a few months to recycle their RRMs. A company that waited up to a year to recycle their spent material [see 30.205(14)] would lose the primary benefit of obtaining a recycling permit, since the company would presumably need to purchase virgin product. In the case of silver recovery units, it is clearly in the company's best interest to recover the silver immediately, given that silver is a precious metal with significant economic value. In addition, speculative accumulation provisions at 310 CMR 30.010 and 30.205(4) require record keeping to ensure materials are indeed recycled, and a minimum of 75% of material be recycled each calendar year.

EPA has also expressed concern that the Massachusetts status calculation rule may lead to certain generators not being required to draft a formal Contingency Plan as would otherwise apply to Large Quantity Generators under federal regulations. Instead of a formal Contingency Plan submittal, all Class A generators must comply with the Emergency Prevention and Response requirements at 310 CMR 30.205(16). This provision requires permittees to "plan and prepare for fires, explosions, or other occurrences that might result in release of hazardous materials to the environment or otherwise constitute a potential hazard to public health, safety, or welfare, or the environment". While 310 CMR 30.205(16) does not explicitly require a written plan, its effect is that all Class A generators must provide sufficient documentation to DEP inspectors in order to demonstrate compliance. This documentation commonly includes an

employee-training handbook and lists with emergency phone numbers, location of fire extinguishers and spill cleanup materials.

In addition, the Massachusetts Department of Public Safety storage permit requirement (527 CMR 14.03 for Flammable and Combustible Liquids) applies to any RRM generator with more than 500 gallons of Class II Combustible Liquids, which would include most spent solvents. Obtaining a written permit for storage of such materials would involve notifying the local fire department, which EPA indicated as a key provision of the Contingency Plan requirement.

In the event of any one of the worst case scenarios envisioned by EPA, whereby recyclable materials are grossly mismanaged by a facility, the Massachusetts regulations require that generators revert to full hazardous waste regulation. See 310 CMR 30.202(3). However, it is important to note that through its regular inspection procedures, the Department has generally not encountered cases of significant mismanagement or of significant potential hazards caused by recycled materials that are incorrectly managed.

EPA's assessment that Massachusetts exclusion of RRMs from generator status, at 310 CMR 30.221(4), is less stringent apparently does not take into account the overall scope and stringency of DEP's entire recycling program. Given the stringency of the general requirements for all recycling permits, DEP determined that it was appropriate to provide an incentive for hazardous waste generators to recycle. See 310 CMR 30.205(1)-(19). Allowing recyclable materials to be excluded makes managing hazardous waste as an RRM an attractive option since it may help generators avoid or pay less in state hazardous waste compliance fees by operating at a lower generator status. This strategy has promoted increased hazardous waste recycling rates in Massachusetts. Higher recycling rates also mean fewer hazardous waste shipments over Massachusetts' roads. The numbers are telling. There are currently 1,369 Class A recycling permits issued to hazardous waste generators: 783 for used oil fired space heaters, 158 stand-alone solvent stills/distillation units, and 40 stand-alone silver recovery units. Under the hazardous waste program, in 1999, 493,000 tons of hazardous waste was recycled in Massachusetts.

Massachusetts has a long history and tradition of pioneering successful, innovative environmental programs designed to enhance and measure environmental performance and to promote pollution prevention. Often, however, these efforts have been met with RCRA authorization barriers because they do not precisely match up to federal line-by-line reviews. DEP has been greatly encouraged by recent EPA policy statements supporting more flexibility in authorization to support capable and innovative approaches to environmental protection.

By way of example, the following paragraphs summarize other Massachusetts programs where EPA has or is in the process of applying more flexibility in its authorization approach, in fact, applying a functional equivalence analysis:

Environmental Results Program (ERP)

The ERP program demonstrates how a state regulatory agency can improve environmental performance by combining compliance assistance, self-certification, performance measurement and oversight. ERP's distinctive self-evaluation and accountability through compliance assistance, certification, and strategic oversight has become an effective, innovative strategy for state regulators to expand their reach to under-regulated or under-inspected entities and groups. Massachusetts recently submitted to EPA a request for approval under Section 112(l) of the Clean Air Act to implement NESHAPS for the state's ERP program. As documented in the June 2000 report issued by the National Academy of Public Administration (Evaluation of the Massachusetts Environmental Results Program, June 2000, Susan April, Tim Greiner, National Academy of Public Administration), EPA had taken an overly rigid approach to state Clean Air Act authorization.

In addition, states criticized EPA, claiming that the rigidity in the existing equivalency determination process did not accommodate existing state rules or state requirements that differed structurally from the federal standards. EPA responded with rule changes to 40 CFR Parts 9 and 63, which modified EPA's procedures for delegating hazardous air pollutant standards to state's under Section 112(l) of the Clean Air Act. (Federal Register, January 12, 1999, September 14, 2000). The new rule authorized EPA to approve alternative air standards when such requirements are demonstrated to be no less stringent than EPA's rules. The rule changes assist states by offering a range of options for demonstrating equivalence with the federal requirements. The rulemaking streamlined the equivalency process to make it easier for states to use the delegation process. In this context, EPA applied both a simpler procedure and considered a broader scope of information. EPA adopted a simple equivalency table, similar to Attachment A, instead of a line-by-line review. In addition, EPA evaluated Massachusetts' multi-media (air, water, waste) regulatory scheme which included the program's extensive compliance assistance, annual certification requirements, more stringent leak detection requirements, return to compliance plans, and performance measurement inspections.

While EPA itself agreed that the Massachusetts ERP program was likely to achieve superior environmental performance in each of its sectors, the agency initially resisted approval because of incidental differences in the state and federal programs. Under a strict, line-by-line MACT delegation analysis, the state program would likely be disapproved. For example, there are differences between Massachusetts ERP and the federal MACT, the most significant being a state 3-year record retention period vs. a federal 5-year requirement. However, while the resulting state program is not identical to the federal program, EPA has indicated a willingness to recognize that ERP provides an overall effect and coverage that is equivalent for authorization purposes. In fact, EPA recently stated that it would publish a proposed notice of intent to approve the Massachusetts ERP program in an upcoming issue of the Federal Register.

EPA is currently partnering with DEP to expand the ERP innovations to other states and national EPA programs. DEP requests that EPA recognize the environmental and regulatory benefits created by utilizing such flexibility and apply a similar analysis to the Class A recycling regulations.

Cathode Ray Tubes (CRTs)

In 1998, DEP developed and promulgated a regulatory system for managing unwanted CRTs both to promote reuse and recycling and to minimize breaking and disposal risks. After a lengthy and often contentious review, EPA refused to provide authorization under RCRA for the Massachusetts CRT program. This denial resulted in DEP needing to reopen discussions with concerned stakeholders, revise its rules and promulgate modified rules after a second round of public hearings. As a result of the changes, EPA has granted "interim" authorization, since it considered the Massachusetts CRT rules to be only *substantially* equivalent to the federal program. To date, DEP, and to a lesser extent, EPA have invested significant resources attempting to reconcile RCRA authorization issues. The "interim" authorization will expire at the end of 2002 and will be re-evaluated by EPA at that time.

EPA has historically classified CRTs as "hazardous waste," based on analysis using the TCLP test. This classification means that, under RCRA, any unwanted CRT generated by a business must be handled as hazardous waste, meeting all the RCRA management standards. DEP argued that this classification was both too broad (arguing that the TCLP test is not appropriate for manufactured items) and also, too narrow (since it does not capture CRTs generated by residents which amount to about half of the waste stream), which poses the same potential environmental hazards as those generated by businesses.

To minimize collection and recycling barriers, and to lower associated costs, the Massachusetts program was designed to keep CRTs from becoming hazardous wherever possible (i.e. broken or crushed by handling facilities so that the lead they contain becomes available for human and/or environmental exposure) by regulating CRTs under appropriate state solid waste standards. This goal was accomplished by establishing appropriate management standards, a CRT disposal ban at Massachusetts' solid waste handling facilities, and by the creation of a private sector recycling infrastructure that includes refurbishing of units that still have a useful life and "de-manufacturing" and component recycling for units that have reached the end of their useful life. The disposal ban applies to CRTs that are generated by both businesses and residents.

Since its inception in 2000, this program has resulted in the recycling of more than 3,222 tons of CRTs, avoiding both hazardous waste management costs for many businesses, residents and municipalities as well as preventing the release of lead into the environment as the CRTs are crushed and disposed. This approach has also been widely commended: it was a semi-finalist in the Ford Foundation/Kennedy School Innovations in American Government Program, placing in the top 100 of 1,400 applications in 2000. Recently, the state of Florida has followed Massachusetts' lead and adopted a similar program for managing CRTs. In addition, the Massachusetts program has been lauded by Consumer Reports for its excellence.

This program offers a more holistic approach to the environmental problems that can result from discarded CRTs than EPA's hazardous waste classification (and the resulting requirements for hazardous waste management). DEP had requested that EPA consider the

program's overall environmental impact in its authorization decision, but EPA initially rejected this request.

Ironically, EPA is now preparing to propose its own long-awaited CRT rule, which is expected to be almost identical to that promulgated by DEP. At the same time, DEP has been left in the uncertain position of having its interim authorization expire soon, with no assurances that a longer-term approval will be granted. EPA's process and decision to provide only interim authorization in 2000 have created a perception that states are penalized for innovative approaches, particularly to emerging environmental problems where results cannot be proven based on experience over many years of practice.

DEP now hopes that EPA's recent policy statements will lead to more positive results from this point forward. DEP requests that these more flexible approaches be applied as EPA evaluates the Massachusetts Class A recycling program, and when it revaluates its interim authorization decision for the Massachusetts CRT program.

VI. ECOS Flexibility

In the absence of an EPA finding that the Massachusetts Class A recycling program is outside the scope of the RCRA authorization process, or that the Massachusetts program is legally or functionally equivalent, DEP requests that EPA authorize the Massachusetts recycling rule by exercising flexibility under the ECOS process. The following analysis addresses the categories/criteria included in the ECOS guidance and DEP asks that EPA consider the arguments made in the other sections of this document as they are also relevant to this ECOS analysis. The specific flexibility DEP seeks is for EPA to grant authorization to the pending Massachusetts regulations described in section II.

The Massachusetts' recycling program provides benefits of flexibility, innovation and superior environmental performance.

The Massachusetts Class A recycling program has been a successful strategy that combines strong management requirements with selected regulatory incentives. Over the past 15 years, it has proven to substantially promote recycling of material that would otherwise need to be managed as hazardous waste, while at the same time ensuring that recycling operations do not pose risks for public health and the environment. The Commonwealth has reaped the benefits of this innovation in terms of conserving valuable resources (including both virgin hazardous materials and disposal capacity), preventing releases to the environment through adequate management procedures, and advancing the state-of-the-art recycling by encouraging the development and use of new technologies.

Since it was established in 1986, and revised in 1995, the Massachusetts Class A recycling program has successfully promoted hazardous waste recycling: between 1990 and 2000, the number of firms holding recycling permits from DEP increased 62% from 912 to 1,461. In 1999, permittees reported recycling 490,000 tons of material that otherwise would have required disposal as hazardous waste. Of this total, 15,000 tons (3%) were materials that would have been covered by the RCRA hazardous waste requirements if it went to disposal. These materials

included 10,400 tons of solvents, 4,000 tons of fluorescent bulbs, and 545 tons of precious metals. The remaining 475,000 tons were materials not covered by the federal requirements, but are regulated by Massachusetts. DEP believes that the increase in recycling permits and the significant amounts of material recycled demonstrates successful environmental protection.

The Massachusetts Hazardous Waste Recycling Innovation: the innovation within the Massachusetts Class A recycling program lies with the incentives it provides for participation (as opposed to full RCRA hazardous waste management requirements for waste disposal), the establishment of management standards that, while not identical to the RCRA hazardous waste standards, provide an equivalent level of environmental protection, and the convenience and flexibility afforded to generators as they make business decisions. The ability to exclude recycled materials from generator status calculations provides generators with an incentive to recycle materials that might not otherwise be recycled under the federal program. Strict adherence to EPA's current equivalency evaluation could eliminate the significant role this incentive plays in motivating generators to recycle materials that might otherwise be sent off-site for disposal.

Environmental Benefits: In the waste management hierarchy, recycling holds a higher position than disposal and the Class A recycling program results in superior environmental performance. By extending the useful life of materials, recycling reduces the use of limited natural resources and the energy required to produce raw hazardous materials. The 1,461 recycling permit holders in 2000 (Class A, B & C), included 951 used oil recyclers, 175 solvents distillers, 85 lead scrap and solder dross recyclers, and 40 stand alone silver recovery units (the remaining 200 permits are too varied to be categorized here).

Because the Class A program promotes recycling at the site of generation, it reduces the risk of transportation-related spills of hazardous waste, since significantly less waste travels over Massachusetts's roads. The 490,000 tons of hazardous waste recycled in 1999, on-site and off-site, far exceeds the 90,000 tons of hazardous waste disposed of in the same year. If none of this material were recycled, there would be a greater chance of transportation accidents and mishandling that could potentially result in releases to the environment. There are no negative environmental trade-offs or burdens with this program. The safe management requirements ensure that recycled materials do not pose a threat before reuse, and the increase in recycling actually results in less exposure along state roadways.

In addition, hazardous waste disposal capacity is constrained in Massachusetts due to the difficulties in siting new facilities and expanding existing ones. By keeping recyclable material out of disposal facilities, the Massachusetts Class A recycling program conserves disposal capacity for material that currently cannot be recycled. It is likely that such conservation results in a benefit to those communities with hazardous waste disposal facilities that may have otherwise received the hazardous waste, had it not been recycled.

Smarter Approaches: The Massachusetts Class A recycling program has removed significant barriers for recycling, while maintaining appropriate safeguards, and is more efficient than the federal program for both the regulated community and for DEP. RCRA section 1003 establishes a national objective of "minimizing the generation of hazardous waste and the land disposal of

hazardous waste by encouraging process substitutions, materials recovery, properly conducted recycling and reuse, and treatment." Yet, historically, industry has asserted that certain RCRA hazardous waste management requirements discourage generators from exploring recycling options for their wastes. The Massachusetts program strives to meet this RCRA goal and has done so effectively.

DEP's recycling program is designed to minimize some of these barriers in order to promote hazardous waste recycling, while at the same time ensuring that such recycling practices are conducted safely. Generators are quick to recognize the benefits of obtaining a Class A recycling permit. Businesses see considerable savings in their purchases of virgin hazardous materials as recycled materials can go back into their production process (e.g., distilled solvents). Many firms have also been able to sell silver that they have recovered through on-site recycling.

In the Massachusetts program, recycling can result in a reduction or elimination of annual hazardous waste compliance fees for generators ($300 for Small quantity Generators and $1,800 for Large Quantity Generators). Lower generator status creates appropriate incentives, endorsed by stakeholders, that strike a balance between economic benefits and environmental protection . Such reduced regulatory requirements can further reduce a company's cost for compliance. For example, SQG's are not required to submit a biennial report describing all hazardous wastes generated. Very Small Quantity Generators are not required to use a state licensed hazardous waste transporter, a state-only requirement for Massachusetts SQGs and LQGs, for off-site shipments or a hazardous waste manifest. Such requirements are more costly than employing common carriers, self-transporting or using other shipping documents for tracking.

The regulatory relief provided to companies with lower generator status also allows DEP to use its staff more efficiently. With less paperwork to track, the agency can continue to provide an adequate level of oversight for recycling activities while directing more of its staff resources to the companies that are handling larger quantities of hazardous waste, and higher risk off-site transport and disposal activities.

As a result, Massachusetts' incentive-based approach to regulating recyclable materials is a smarter approach than the RCRA scheme: it has established an effective balance that reduces costs and regulatory burdens for generators, while promoting the efficient use of resources and ensuring the protection of public health and the environment.

The Massachusetts Toxics Use Reduction (TUR) Program is another innovative DEP initiative that has helped to promote hazardous waste recycling and reduce reliance on toxic chemicals among businesses dramatically. Over the past ten years, TUR has proven to be one of the most successful pollution prevention initiatives in the nation. It has demonstrated that a balance of compliance and assistance can successfully promote pollution prevention with a focus on both industrial efficiency and community right-to-know. TUR is designed to promote toxics use reduction by making companies more aware of the ways in which they use and waste chemicals. This increased awareness has led companies to understand the benefits and increase the amount of hazardous waste recycling. Since 1990, the first of year of TUR reporting, Massachusetts industries have decreased their chemical use by 201 million pounds, or 24%, and have decreased their waste generation by nearly 44 million pounds, or 41%. In addition, they

have reduced their releases by 16.2 million pounds; an 80% reduction in permitted emissions. Massachusetts has experienced a greater reduction in the use and release of toxic chemicals than other states. Along with the hazardous waste fees program, TUR has helped reduce the number of LQGs in Massachusetts from well over 1,000 in the early 1990s to less than 500 in 2001. The TUR Program continues to be recognized for its creativity and proven success. The *Innovations in American Government* program, run by the Kennedy School of Government and the Ford Foundation, chose the TUR Program for the 1999 award (See Attachment B – available in hard copy only).

Stakeholder Involvement: Stakeholders have been actively involved with the development, review and amendment of the Class A program since its inception in 1986. The Massachusetts Hazardous Waste Management Act (M.G.L. c. 21C) specifies that the hazardous waste program must conduct six public hearings, more than any other DEP program, when amending its regulations. These are typically held in all parts of the state for the convenience of stakeholders who want to provide their input, and are widely advertised in the Commonwealth's newspapers. Before the public hearings are held, DEP is also required by a set of Executive Orders to offer an opportunity to comment on draft rules to state agencies and municipalities whose constituencies could be affected.

In addition, significant stakeholder involvement is provided through the Massachusetts Hazardous Waste Advisory Committee, which was established by MGL c. 21C with membership mandated to include the full spectrum of stakeholders in hazardous waste management issues. The Committee's 15 members are appointed by the Governor, and represent a balance of interests from the business community, environmental and public health organizations, and municipal and regional officials. The Committee, whose meetings are open to the public, has established a number of subcommittees that assist DEP in developing regulations and policies on specific subjects. As the subcommittees typically include representatives of additional interest groups, they ensure that the Committee and DEP obtain advice from experts, affected parties, and represent the broadest possible spectrum of interests. If EPA authorizes the Class A recycling program through its ECOS program, DEP will present such a result to the HWAC. Any regulatory change or implementation of existing policy on this topic will also be presented to the HWAC to get its input in the time-line and process necessary for implementing any such authorization or implementation of policy.

Measuring and Verifying: The promotion of hazardous waste recycling is a key element in DEP's goals for waste prevention:

- Ensuring that wastes, and the use of toxics are prevented to the maximum extent possible;
- Reducing risks from wastes by ensuring their safe management and control:
- Ensuring that disposal is a last resort for wastes that are produced (and that disposal does not endanger public health or the environment); and
- Collecting data about wastes, their sources, environmental management activities, and making this data accessible to the public as efficiently and as effectively as possible.

The primary means of measuring and verifying the overall effectiveness of the Class A Recycling Program is provided by all Class A Generators in required Annual Hazardous Waste Recycling Reports. The data provided throughout this document came from those reports, which provide DEP with a wealth of information, including breakdowns by material recycled (RCRA versus state-only wastes), on-site versus off-site recycling, and recycling totals (tons/year). These reports provide valuable data for DEP to review recycling activities conducted by generators. They also provide an opportunity to develop summary and trend information in terms of materials covered, technologies used, industries involved, etc., and to identify areas where the program needs improvement. This information has and will continue to allow EPA to evaluate the overall effectiveness of the Massachusetts Class A recycling program.

Accountability and Enforcement

The Massachusetts Class A recycling program is enforced under provisions of the Massachusetts Enforcement Response Guidance, a comprehensive set of guidelines for administrative, civil and criminal actions.

Over the past 15 years, DEP has conducted inspections, performed record reviews and taken timely and appropriate enforcement actions for all identified violations of the Class A recycling regulations.

VII. Conclusion

Massachusetts has demonstrated, under four separate analyses, how EPA could authorize its Class A recycling program. Massachusetts DEP requests that EPA grant RCRA authorization to the pending Massachusetts regulations under any one of these scenarios. First, it is clear that like the materials evaluated in Battery Recyclers, the materials regulated under the Massachusetts program are not "Solid Waste" and therefore are not subject to RCRA. Second, EPA may more broadly interpret RCRA and its own regulations for authorizing state RCRA programs. In fact, Massachusetts' rules may be viewed as legally equivalent to the federal rules. Third, the Massachusetts' rules are functionally equivalent to the federal rules and are, in many respects, more stringent. EPA should consider the totality of the Massachusetts rules and program results in making an equivalence determination rather than relying solely on a line-by-line checklist review. In addition, EPA should apply the flexibility it promotes in its' "Program Strategy to Meet 2005 GPRA Goals", align its current authorization practices with the stated flexibility, and authorize the pending regulations. A fourth alternative is to authorize the Massachusetts' rules under the ECOS process by exercising flexibility.

Massachusetts' Class A recycling program has been a successful strategy that combines strong management requirements with selected regulatory incentives. It has proven over the past 15 years to promote recycling; a superior option in the waste management hierarchy for managing used materials, while ensuring environmental protection. Massachusetts DEP requests that in accordance with the ECOS process, EPA provide the rationale for not adopting any or all of the positions described above. We appreciate this opportunity to present our positions and are optimistic that EPA will favorably act on these requests.